

ABSTRACT OF THE DISCLOSURE

A method for determining an optimized position between the tire and rim of a wheel to improve operation smoothness of the wheel. Measurements are conducted to determine respective effects of wheel imbalance and non-uniformities contributed by the tire and rim at different rotational positions. An index vector representing the respective effects is defined. The optimized position is determined based on an observation of changes of the index vector relative to the changes of respective effects of wheel imbalance and non-uniformities contributed by the tire and rim at different rotational positions. The relative position between the tire and rim is adjusted according to the optimized position to achieve better operation of the wheel.